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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/660,762 09/12/2003 Friedrich Schwamm 038741.52724US 5781 23911 7590 05/24/2004 **EXAMINER CROWELL & MORING LLP** NGUYEN, HANH N INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 ART UNIT PAPER NUMBER WASHINGTON, DC 20044-4300 2834

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)		
Office Action Summary		10/660,762	SCHWAMM, FRIEDRICH		
		Examin r			
			Art Unit		
	The MAILING DATE of this communication app	Nguyen N Hanh	2834	•	
Period for	Reply	ars on the cover sn -t with the c	correspondenc addr	'ess	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status		×			
1)⊠ R	esponsive to communication(s) filed on Amen	dment filed on 9/12/03			
2a) <u></u> ⊤		action is non-final.			
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
		•			
	laim(s) <u>1-16</u> is/are pending in the application.	•			
) Of the above claim(s) <u>1-5</u> is/are withdrawn fr	om consideration.			
	laim(s) <u>6-16</u> is/are allowed.	* ·			
	aim(s) <u>6-16</u> is/are rejected.	•		•	
	aim(s) is/are objected to.		•		
8)∐ CI	aim(s) are subject to restriction and/or	election requirement.			
Application	Papers 2				
9)□ Th	e specification is objected to by the Examiner.	•			
10)⊠ The drawing(s) filed on <u>14 September 2002</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) he had in the drawing (s) he had					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The	e oath or declaration is objected to by the Exa	n is required if the drawing(s) is objection. Note the attached Office A	cted to. See 37 CFR and to the section or form PTO-	1.121(d). 152.	
Priority und	ler 35 U.S.C. § 119	<u>.</u> `		545	
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:					
_			•		
 1. ☑ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No. 					
2.L 3.[- Profits documents	have been received in Application	n No		
٥.٢	, and a separation of the phone;	documents have been received	in this National Sta	ge	
* See	application from the International Bureau (PCT Rule 17.2(a)).			
	the attached detailed Office action for a list of	the certified copies not received			
		in the second second second			
Attachment(s)		•	. *		
` ,	References Cited (PTO-892)	, C			
) Notice of	Draftsperson's Patent Drawing Review (PTO-948)	4)	TO-413)		
) 🔲 Informatio	on Disclosure Statement(s) (PTO-1449 or PTO/SB/08) (s)/Mail Date		ent Application (PTO-152	2)	
				.	

Specification

Drawings

- 1. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- 2. The drawings are objected to because Fig. 1 and Fig. 2 were illustrated by foreign language (stand der technik). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 11-16 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 11,12,13 and 15 recite the limitations "the third ring", "the fourth ring", "the fifth ring" and "the sixth ring" while the drawings and the specification only show rotor element 36 and 37 (or ring 36 and 37) and two additional rings 41 for centering the rotor. In lights of the specification, the Examiner interprets "the third ring", "the fourth ring", "the fifth ring" and "the sixth ring" as rings 41, each of the ring 41 includes two separate ring with magnets of opposite polarity.

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Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Web.

Regarding claim 6, Web discloses an electric drive arrangement comprising: a stator (A1 and A2 in Fig. 1), said stator including U-shaped stator blades (E11 and E12) forming a cylindrical ring (Fig. 4 shows the simplest motor construction of the above structure); and a rotor (S2), said rotor including permanent magnets (w1 and w2) arranged at pole ends of said stator blades; wherein said permanent magnets form two cylindrical rotor elements (Fig. 4), and wherein said stator blades form two cylindrical stator rings, each of said two cylindrical stator rings being arranged at opposite sides of said rotor such that said rotor is laterally surrounded by said two cylindrical stator rings (Fig. 2 and Fig. 4).

Regarding claim 7, Web also discloses an electric drive arrangement wherein said two cylindrical rotor elements extend in a region of said pole ends of said stator blades, and wherein each of said two cylindrical rotor elements has two rings of polarity-alternating magnets (W1' and W1").

Regarding claim 8, Web also discloses an electric drive arrangement wherein, within each of said two cylindrical rotor elements, adjacent permanent magnets of one

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of said two rings have different polarity from one another and adjacent permanent magnets of a first and a second of said two rings have different polarity from one another (Fig. 1).

Regarding claim 9, Web also discloses an electric drive arrangement wherein permanent magnets from said first of said two cylindrical rotor elements have different polarity from opposed permanent magnets in said second of said two cylindrical rotor elements (Fig. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Web in view of Horng.

Regarding claim 10, Web shows all limitations of the claimed invention except showing the electric drive arrangement wherein additional permanent magnets are arranged about said stator blades and about said permanent magnets of said rotor for magnetic centering of said rotor.

However, Hong discloses an electric motor wherein additional permanent magnets are arranged about the stator and about the shaft of the rotor for magnetic centering of said rotor (Fig. 5) for the purpose of preventing frictional contact when the motor is in operating condition.

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Since Web and Hong are in the same field of endeavor, the purpose disclosed by Hong would have been recognized in the pertinent art of Web.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Web by arranging additional permanent magnets about the stator blades and about said permanent magnets of the rotor for magnetic centering of said rotor as taught by Hong for the purpose of preventing frictional contact when the motor is in operating condition.

Regarding claim 11, the structure disclosed by Web, modified by Hong shows the electric drive arrangement wherein a first of said two cylindrical rotor elements includes a third ring of polarity-alternating magnets and a fourth ring of polarity-alternating magnets and wherein a second of said two cylindrical rotor elements includes a fifth ring of polarity-alternating magnets and a sixth ring of polarity-alternating magnets (because each additional ring has two separate rings with opposite polarity).

Regarding claim 12, the structure disclosed by Web, modified by Hong shows the electric drive arrangement wherein adjacent magnets in said third ring have different polarity from one another, adjacent magnets in said fourth ring have different polarity from one another, adjacent magnets in said fifth ring have different polarity from one another, and adjacent magnets in said sixth ring have different polarity from one another (Fig. 5 of Hong).

Regarding claim 13, the structure disclosed by Web, modified by Hong shows the electric drive wherein adjacent magnets in said third and said fourth rings have different

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polarity from one another and adjacent magnets in said firth and sixth rings have different polarity from one another.

Regarding claim 14, the structure disclosed by Web, modified by Hong shows the electric drive element wherein opposing magnets in said first of two said cylindrical rotor elements and said second of two cylindrical rotor elements have different polarity from one another.

Regarding claim 15, the structure disclosed by Web, modified by Hong shows the electric drive element wherein opposing magnets in said third ring and said fifth ring have different polarity from one another and opposing magnets in said fourth ring and said sixth ring have different polarity from one another.

Regarding claim 16, it is noted that all limitations of the claimed invention have been fulfilled by web and Hong as in claim 10.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (571) 272-2031. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner 's supervisor, Darren Schuberge, can be reached on (571) 272-2044. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HNN

May 14, 2004

DANG LE PRIMARY EXAMINER